

CLAIMS

1. A method for transferring data comprising:
performing a first operation wherein the first operation copies a first file from a first memory to a second memory, and a second file from the first memory to the second
5 memory, wherein the first file is copied substantially concurrently with the copying of the second file, and wherein the first operation results in a first copied file and a second copied file in the second memory; and
performing a second operation wherein the second operation updates the first copied file and the second copied file in a predetermined order.
10
2. The method of claim 1, wherein the first operation includes a synchronization operation.
3. The method of claim 1, wherein the second operation includes a substantially
15 real-time replication operation.
4. The method of claim 1, wherein the first file and the second file are copied regardless of order.
- 20 5. The method of claim 1, wherein the copying of the first file is associated with a first thread and the copying of the second file is associated with a second thread.

6. The method of claim 1, wherein a first command associated with the first operation can be processed by a first thread or a second thread, and a second command associated with the second operation can be processed by the second thread.

5 7. The method of claim 1, wherein the copying of the first file is associated with a first connection between the first memory and the second memory, and the copying of the second file is associated with a second connection between the first memory and the second memory.

10 8. A system for transferring data comprising:
a processor;
a first memory coupled to the processor, wherein the first memory is associated with a first file and a second file; and
wherein the processor is configured to perform a first operation wherein the first
15 operation copies the first file from the first memory to a second memory, and a second file from the first memory to the second memory, wherein the first file is copied substantially concurrently with the copying of the second file, and wherein the first operation results in a first copied file in the second memory and a second copied file in the second memory; and also configured to perform a second operation wherein the
20 second operation updates the first copied file and the second copied file in a predetermined order.

9. A method for transferring data associated with a real-time data replication system comprising:

providing a first thread, wherein the first thread can process a first and a second types of commands;

providing a second thread, wherein the second thread can process the first type of command;

5 substantially concurrently processing a first command by the first thread and a second command by the second thread, wherein the first and second commands are associated with the first type of command.

10 10. The method of claim 9, wherein the first type of command includes a sync command.

11. The method of claim 9, wherein the second type of command includes a non-synch command.

15 12. The method of claim 9, wherein the transfer of the first and second commands by the first and second threads is performed regardless of order associated with the first and second commands.

20 13. The method of claim 9, wherein the first type of command has an order associated with it and the order is maintained.

25 14. The method of claim 9, further comprising determining whether the second thread can move ahead in a queue, wherein the first command and the second command are associated with the queue.

15. The method of claim 9, wherein the second thread can move ahead in a queue if the first thread is associated with the first type of command, wherein the first command and the second command are associated with the queue.

5 16. The method of claim 9, wherein the second thread cannot move ahead in a queue if the first thread is associated with the second type of command, wherein the first command and the second command are associated with the queue.

17. The method of claim 9, wherein the first thread cannot process the second type of
10 command unless the second thread is waiting on the first thread to process the second type of command.

18. A system for transferring data associated with a real-time data replication system comprising:

15 a processor configured to provide a first thread, wherein the first thread can process a first and a second types of commands; also configured to provide a second thread, wherein the second thread can process the first type of command; and the processor also configured to substantially concurrently transfer a first command by the first thread and a second command by the second thread, wherein the first and second
20 commands are associated with the first type of command; and

a memory coupled to the processor for providing the processor with instructions.

19. A computer program product for transferring data, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

performing a first operation wherein the first operation copies a first file from a first memory to a second memory, and a second file from the first memory to the second memory, wherein the first file is copied substantially concurrently with the copying of the second file, and wherein the first operation results in a first copied file and a second copied file in the second memory; and

performing a second operation wherein the second operation updates the first copied file and the second copied file in a predetermined order.

20. A computer program product for transferring data associated with a real-time data replication system, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

providing a first thread, wherein the first thread can process a first and a second types of commands;

providing a second thread, wherein the second thread can process the first type of command;

substantially concurrently transferring a first command by the first thread and a second command by the second thread, wherein the first and second commands are associated with the first type of command.